

WE CLAIM:

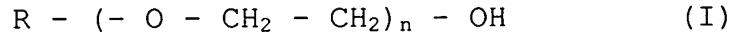
1 A built laundry detergent composition comprising

5

(i) from 5 to 40 wt% of surfactant consisting essentially
of:

10 (i) (a) an anionic sulfonate or sulfate surfactant,

 (i) (b) an ethoxylated alcohol nonionic surfactant of
 the general formula I



15

wherein R is a hydrocarbyl chain having from 8 to 16
carbon atoms, and the average degree of ethoxylation n
is from 20 to 50,

20

 (i) (c) a quaternary ammonium cationic surfactant,

 (ii) from 10 to 80 wt% of detergency builder,

 (iii) optionally other detergent ingredients to 100 wt%.

25

2 A detergent composition as claimed in claim 1, which
comprises from 7 to 30 wt% of the surfactant (i).

3 A detergent composition as claimed in claim 1, wherein
the surfactant (i) consists essentially of:

5 (i) (a) from 20 to 98 wt% of the anionic sulfonate or
sulfate detergent;

(i) (b) from 1 to 60 wt% of the nonionic surfactant, and

(i) (c) from 1 to 60 wt% of the cationic surfactant.

10

4 A detergent composition as claimed in claim 1, which
comprises, based on the composition:

15 (i) (a) from 1 to 20 wt% of the anionic sulfonate or
sulfate detergent;

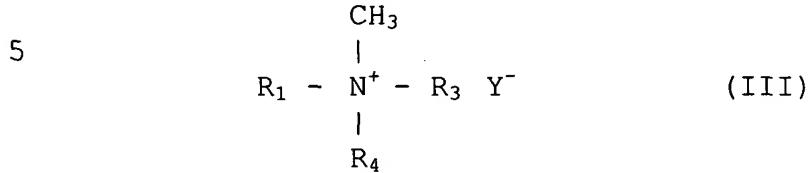
(i) (b) from 0.5 to 20 wt% of the nonionic surfactant, and

20 (i) (c) from 0.1 to 20 wt% of the cationic surfactant.

5 A detergent composition as claimed in claim 1, wherein
the weight ratios between the surfactants are within the
25 following ranges:

(i) (a):(i) (b)	1.5:1 - 25:1
(i) (a):(i) (c)	0.2:1 - 5:1
(i) (b):(i) (c)	0.1:1 - 3:1

6 A detergent composition as claimed in claim 1, wherein
the cationic surfactant is a compound of the formula III:



10 in which R₁ is a C₈-C₁₈ alkyl group, more preferably a C₈-C₁₀ or C₁₂-C₁₄ alkyl group, R₂ is a methyl group, and R₃ and R₄, which may be the same or different, are methyl or hydroxyethyl groups.

15

7 A detergent composition as claimed in claim 6, wherein the surfactant (i) consists essentially of:

20 (i) (a) from 50 to 98 wt% of the anionic sulfonate or sulfate detergent;

(i) (b) from 1 to 30 wt% of the nonionic surfactant, and

25 (i) (c) from 1 to 30 wt% of the cationic surfactant.

8 A detergent composition as claimed in claim 7, wherein
the surfactant (i) consists essentially of:

5 (i) (a) from 60 to 95 wt% of the anionic sulfonate or
sulfate detergent;

(i) (b) from 5 to 25 wt% of the nonionic surfactant, and

(i) (c) from 5 to 25 wt% of the cationic surfactant.

10

9 A detergent composition as claimed in claim 6, which
comprises, based on the composition:

15 (i) (a) from 3 to 30 wt% of the anionic sulfonate or
sulfate detergent;

(i) (b) from 0.5 to 10 wt% of the nonionic surfactant, and

20 (i) (c) from 0.1 to 10 wt% of the cationic surfactant.

10 A detergent composition as claimed in claim 9, which
comprises, based on the composition:

25

(i) (a) from 5 to 25 wt% of the anionic sulfonate or
sulfate detergent;

(i) (b) from 1 to 5 wt% of the nonionic surfactant, and

30

(i) (c) from 0.2 to 5 wt% of the cationic surfactant.

11 A detergent composition as claimed in claim 6, wherein the weight ratios between the surfactants are within the following ranges:

(i) (a):(i) (b)	2:1 - 25:1
(i) (a):(i) (c)	2:1 - 50:1
(i) (b):(i) (c)	0.1:1 - 3:1

5

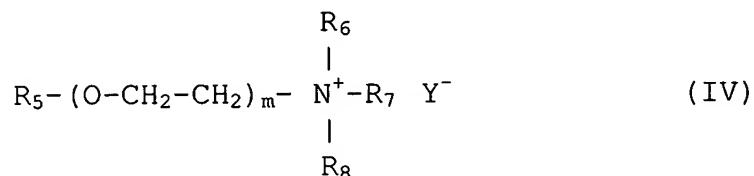
12 A detergent composition as claimed in claim 11, wherein the weight ratios between the surfactants are within the following ranges:

10

(i) (a):(i) (b)	3:1 - 20:1
(i) (a):(i) (c)	3:1 - 30:1
(i) (b):(i) (c)	0.5:1 - 2:1

13 A detergent composition as claimed in claim 1, wherein the cationic surfactant (i)(c) is an ethoxylated quaternary ammonium compound of the formula IV:

5



10

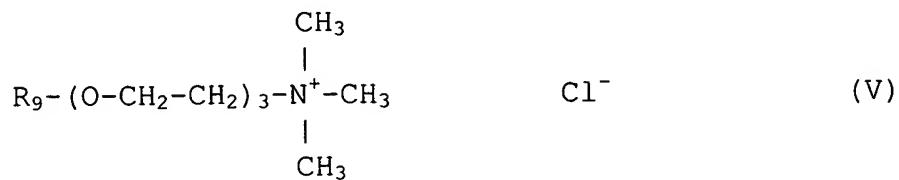
wherein R_5 is a C_6-C_{20} alkyl group,
 m is an integer from 1 to 20,
 R_6 and R_7 , which may be the same or different, each represents a C_1-C_4 alkyl group or a C_2-C_4 hydroxyalkyl group,
 R_8 represents a C_1-C_4 alkyl group, and
 Y^- represents a monovalent solubilising anion.

20 14 A detergent composition as claimed in claim 13, wherein the cationic surfactant (i)(c) is a compound of the formula IV in which

R_5 is a $C_{10}-C_{16}$ alkyl group,
 m is from 1 to 4,
25 R_6 , R_7 and R_8 are methyl groups, and
 Y^- represents Cl^- .

15 A detergent composition as claimed in claim 14, wherein
the cationic surfactant (i)(c) is a compound of the formula
V:

5



10

wherein R₉ is a C₁₂-C₁₄ alkyl group.

16 A detergent composition as claimed in claim 13, wherein
15 the surfactant (i) consists essentially of:

(i) (a) from 20 to 80 wt% of the anionic sulfonate or
sulfate detergent;

20 (i) (b) from 5 to 40 wt% of the nonionic surfactant, and

(i) (c) from 10 to 60 wt% of the cationic surfactant.

17 A detergent composition as claimed in claim 16, wherein
the surfactant (i) consists essentially of:

5 (i)(a) from 30 to 60 wt% of the anionic sulfonate or
sulfate detergent;

(i)(b) from 10 to 30 wt% of the nonionic surfactant, and

(i)(c) from 20 to 50 wt% of the cationic surfactant.

10

18 A detergent composition as claimed in claim 13, which
comprises, based on the composition:

15 (i)(a) from 3 to 30 wt% of the anionic sulfonate or
sulfate detergent;

(i)(b) from 0.5 to 10 wt% of the nonionic surfactant, and

20 (i)(c) from 0.1 to 10 wt% of the cationic surfactant.

19 A detergent composition as claimed in claim 18, which
comprises, based on the composition:

25

(i)(a) from 5 to 25 wt% of the anionic sulfonate or
sulfate detergent;

(i)(b) from 1 to 5 wt% of the nonionic surfactant, and

30 (i)(c) from 0.2 to 5 wt% of the cationic surfactant.

20 A detergent composition as claimed in claim 13, wherein the weight ratios between the surfactants are within the following ranges:

(i) (a):(i) (b)	1.5:1 - 10:1
(i) (a):(i) (c)	0.2:1 - 5:1
(i) (b):(i) (c)	0.2:1 - 5:1

5

21 A detergent composition as claimed in claim 20, wherein the weight ratios between the surfactants are within the
10 following ranges:

(i) (a):(i) (b)	1:1 - 5:1
(i) (a):(i) (c)	0.5:1 - 3:1
(i) (b):(i) (c)	0.5:1 - 3:1

22 A detergent composition as claimed in claim 1, wherein
15 the ethoxylated nonionic surfactant (i) (b) has a hydrocarbon chain containing from 10 to 16 carbon atoms.

23 A detergent composition as claimed in claim 22, wherein
20 the ethoxylated nonionic surfactant (i) (b) has a hydrocarbon chain containing from 12 to 15 carbon atoms.

24 A detergent composition as claimed in claim 1, wherein the ethoxylated nonionic surfactant (i)(b) has an average degree of ethoxylation n of from 25 to 40.

5

25 A detergent composition as claimed in claim 1, wherein the anionic surfactant (i)(a) is linear alkylbenzene sulfonate.

10

26 A detergent composition as claimed in claim 1, wherein the composition is free from nonionic surfactants other than the nonionic surfactant (i)(b).

15

27 A detergent composition as claimed in claim 1, which comprises from 10 to 40 wt% of a detergency builder (ii) selected from the group consisting of sodium tripolyphosphate, zeolites, sodium carbonate, sodium citrate, layered silicates, and combinations thereof.

20

28 A detergent composition as claimed in claim 1, which comprises one or more optional ingredients (iii) selected from the group consisting of soaps, peroxyacid and persalt bleaches, bleach activators, sequestrants, cellulose ethers and esters, other antiredeposition agents, sodium sulfate, sodium silicate, sodium chloride, calcium chloride, sodium bicarbonate, other inorganic salts, fluorescers, photobleaches, polyvinyl pyrrolidone, other dye transfer inhibiting polymers, foam controllers, foam boosters, 10 acrylic and acrylic/maleic polymers, proteases, lipases, cellulases, amylases, other detergent enzymes, citric acid, soil release polymers, fabric conditioning compounds, coloured speckles, and perfume.

15

29 A detergent composition as claimed in claim 1, which is in powder form.

20 30 A process for laundering textile fabrics by machine or hand, which includes the step of immersing the fabrics in a wash liquor comprising water in which a laundry detergent composition as claimed in claim 1 is dissolved or dispersed.

25